

A Triassic conchostracan from near Murgon, SEQ.

Eastern Australian Early- to Mid-Triassic conchostracans have been described by Webb (1978) from the Sydney Basin and Tasch (1979) from the Bowen Basin. A major summary of Gondwanan occurrences, including Australia, was provided by Tasch (1987). I here report the first Mid to Late Triassic conchostracan from the Aranbanga Volcanics Group (Donchak et al. 1999), 14 km north of Murgon, southeast Queensland. The genus reported here is cosmopolitan in distribution (Tasch 1969) with many species known from the southern continents (Tasch 1987).

The Aranbanga Volcanics are a diverse suite of volcanics and volcanogenic sedimentary rocks occupying a wide band throughout the south Burnett region of south east Queensland. It contains a diverse flora and a fauna including insects and freshwater bivalves. The Aranbanga Volcanics have been ascribed a Mid to Late Triassic age based on the flora and a K-Ar date (Day et al. 1983).

Systematic Palaeontology

Order CONCHOSTRACA Sars, 1867

Suborder SPINICAUDATA Linder, 1945

Superfamily CYZICOIDEA Stebbing, 1910

Family EUESTHERIIDAE Defretin, 1965

Euestheria Depéret & Mazeran, 1912

Type Species. *Posidonia minuta* Von Zeiten, 1833 by subsequent designation of Raymond (1946), from the Upper Triassic of Great Britain.

Euestheria acampestris sp. nov. (Fig. 1)

Material. Holotype: QMF54807, right valve. Paratypes QMF54794-54806, QMF54808 (11 left, 3 right valves); all from QML1331, Aranbanga Volcanics Group mid- to late Triassic, near Murgon; 151° 53' 20" E, 26° 08' 10" S. Note that these specimens are selected from a slab bearing several hundred individuals.

Diagnosis. Valves medium sized (up to 8.8 mm long); hinge short; micro-ornament fine and papillate.

Etymology. Latin: *campestris* meaning flat plain, prefix '*a-*' meaning without; *acampestris* referring to an apparent lack of a flat elongate hingeline.

Description. Valves 6.1-8.8 mm long, elliptical with width approximately two-thirds of length; umbo small, subterminal, approximately one-sixth of the length of the valve in from point of maximum anterior bulge. Dorsal margin completely rounded, with hingeline very short (to the extent of appearing absent). Valve is fairly symmetrical about the midline transverse axis (perpendicular to dorsal margin). Maximum ventral bulge approximately at mid-length.

Growth bands comarginal, distinct, rugose, 10-16 per valve (in specimens under discussion, with larger valves having more bands), more pronounced toward ventral margin where they are closely spaced; elsewhere bands are more widely spaced. Growth bands nonexistent near umbo.



FIG. 1. *Euestheria acampestris* sp. nov.; A, Holotype QMF54807, right valve, lateral view, scale bar = 1 mm; B, Paratype QMF54805, right valve, lateral view, scale bar = 1 mm; C, Detail of ornament on paratype QMF54801, scale bar = 0.5 mm. D, Detail of ornament, paratype QMF54804, scale bar = 0.5 mm.

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Micro-ornament uniformly spaced, small, round papillae, which are slightly smaller than the distance between growth lines; papillae more visible toward the margin.

Remarks. The material is assigned to *Euestheria* on the basis of prominent growth lines, the papillate ornament, resembling the 'polygons' in the type species and the relatively short hinge line. The material is similar to *Cyzicus* (*Euestheria*) *dualis* Tasch 1987 from the Lower Triassic Panchet Formation of India and *Cyzicus* (*Lioestheria*) *disgregaris* Tasch 1987 from the Jurassic Blizzard Heights and Storm Peak localities of Antarctica, with approximately symmetrical and elliptical valves and the small subterminal umbo lacking growth bands near it. It is distinguishable from *C. dualis* however by the lack of an elongate hingeline along the dorsal margin and from *C. disgregaris* by its fewer, more widely spaced growth bands, an umbo more anteriorly located and lack of barred ornament. The papillate micro-ornament is similar to *Cyzicus* (*Euestheria*) *castaneus* Tasch 1987 from the Jurassic at Blizzard Heights and Storm Peak in Antarctica, but in *C. castaneus* the microstructure is finer. *C. castaneus* also differs by having a more elongate hingeline. This is also the case for *Endolimnadiopsis eichwaldi* (Netshajev) (Shen, 1985) from the Upper Permian Kazan Formation of Russia. The species *Endolimnadiopsis rusconii* Gallego, 2004 from the Upper Triassic Cacheuta Formation of Argentina differs from *E. acampestria* in having an elongate posterior hingeline and finer, variably-sized papillate micro-ornament.

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